REMARKS

Claims 1-32 are currently pending in the application. Claims 1 – 32 are rejected under 35 USC 103(a).

Claims 1, 13 and 22 are amended.

Examiner's rejections of all of the claims are respectfully traversed.

Reconsideration of the above-identified application in view of the traversal, detailed in the remarks following and the appended declaration of Dr Itzhak Shalev, an independent expert, is respectfully requested.

Claims Rejections – 35 U.S.C. 103

Claims 1, 13 and 22 are amended to incorporate into the claim the feature pointed out by the Examiner in the advisory action and repeated in the current Office Action, namely the sequential use of the print table assemblies is now stated as being the solution to the problem that "downtime for folding textiles onto one of said printing table assemblies is utilized by said applying ink onto a second of said printing table assemblies".

In light of the above amendment the Examiner is asked to reconsider the relevance of the citations and the combination of citations to the present claims.

Claims 13-21 are rejected under 35 U.S.C. 103(a) over a mosaic of *six* citations, Iwatsuki et al (US 2003/0197772) in view of Loopstra et al (US 6,262,796), Codos (US 6,755,518), Rasmussen et al (US 6,536,894), Rezanka (US 5,757,407) and Yamada (US 6,042,228.

Iwatsuki relates to a platen device for an ink-jet printer for working with textiles. As such it represents the prior art which forms the background to the present invention. Only a single platen is shown and the problem to which the present invention relates is clearly present. Iwatsuki gives no hint of a solution.

Loopstra relates to the field of semiconductor lithography. Seminconductor lithography relates to *nanometer-size features* best approached by an *electron microscope*, whereas textile printers relate to *garment size objects*. Semiconductor lithography has no relation to the present invention. That is to say it is not relevant to textile printing. The skilled person working in the field of textile printing, typically a *mechanical engineer*, would *never consult* documents relating to semiconductor

lithography, which is a field generally involving *applied physicists, clean rooms, white coats and multi-million dollar budgets*. Substrate management in the two fields, one of *small rigid crystal wafers*, and the other of *large flexible fabrics*, is completely unrelated. The reference to Loopstra is totally artificial and defies all common sense.

Applicant appends the **Declaration** of Dr Itzhak Shalev, an independent expert in the field of textile printing. Such a declaration by an expert is evidence in US law. Dr Shalev is of the opinion that:

> "a worker considering the problem of better utilization of down time on a textile printing device caused by the need to fold the textile onto the printing plate would not consider the citation Loopstra et al (US 6,262,796), attached hereto as exhibit A, because this citation relates to the field of semiconductor lithography. The issues and problems that arise in semiconductor lithography are far removed from the issues and problems that arise in textile printing. The scales involved in the two fields are far removed from each other, one works in the micron and nanometer scale and the other in the meter scale. The budgets and in the two fields are far removed from each other. The working environments in the two fields are far removed from each other. Furthermore, the training and study for each of the two fields are far removed from each other such that a researcher working in one field would not consider the other field in order to find solutions to problems."

It is therefore concluded that the citation of Loopstra must be withdrawn.

Dr Shalev further observes in relation to Loopstra:

> "Furthermore in the semiconductor field, positioning of the die is carried out by a robot arm using suction, and the die does not require folding, so that a person wishing to solve the problem of a human operator requiring to fold the textile would simply have no reason to suspect that Loopstra, or any other document in the semiconductor lithography field would teach a solution to his problem."

For this reason as well the Examiner cannot but conclude that the citation to Loopstra is not legitimate.

Codos relates to printing onto rigid substrates such as car doors etc. It mentions that the rigid substrate could have a fabric surface, but does not actually relate to fabrics as such.

Rasmussen relates to heating paper to dry it prior to printing thereon with wet ink. As such it does not relate to printing of fabrics.

Rezanka relates to ink jet printers for printing on paper, and as such has nothing to do with printing of fabrics.

Yamada relates to a paper feed system, and as such has nothing to do with printing of fabrics.

Claim 13 and the Problem Solved

The present claim relates to textile printing. The skilled person starting with Iwatsuki would consider the problem that the print head is left waiting while the operator spends time folding the textile on the platter. That is to say, because of the unique problem in textile printing of idle time due to folding of the textile onto the platen, idle time of the printer exists.

This idle time due to folding is different in quality from the general interest in increasing throughput. Paper can always be fed faster but fabrics have to be folded. This issue is not addressed in *any* of the documents in the Examiner's rejection.

First Argument

As explained above, none of the remaining five citations provide a solution to the issue of *down time* of the printhead *due to* the need to fold the fabrics. While it is true that some of them do deal with more efficient use of the printhead by providing faster feed of the paper, this is not a solution to the present problem since, while paper can always be fed faster, garments must be folded manually and cannot simply be fed faster. As none of the citations solve the issue, and the issue is now included explicitly in the claim, the present claim is inventive.

Second Argument

In the alternative it is argued that the very fact that the Examiner has to cite *six* different documents, only one of which is in the field of the present invention, is in itself

proof of inventive step. That is to say the very mosaic provided by the Examiner is proof that claim 13 is inventive.

Third Argument

Since the problem solved by the inventor is specific to textiles and none of the five supporting citations deal with *textiles at all* the skilled person would not consider them in trying to find his solution. Since *none of them relate to textiles*, none of them even promise to the skilled person that they should be consulted to search for a solution to his problem of *down time due to the need to fold the textile on the platen.* This is because *none of them teach printing of textiles.*

Therefore the skilled person faced with the above problem would *never consider any of them.* Indeed he would *certainly* not consider Loopstra as it has nothing whatsoever to do with *any field which the mechanical engineer working on textile printing would be familiar with,* for the reasons given above, and in accordance with the appended declaration.

Thus the skilled person *would never make* the mosaic of six documents that the Examiner is presenting. Even if he did he would *not appreciate* that it held a solution to his problem.

Examiner admits in connection with Loopstra that Iwatsuki fails to teach the claimed feature of:

> "a second linear motion X axis stage mounted on said frame parallel to said first axis stage alongside said first axis stage for X axis motion parallel to X-axis motion of said first stage, and arranged for operation independently of said first axis stage or a second printing table assembly movable on said linear X axis stage base independently of said first printing table assembly."

As Loopstra cannot be taken into account for the reasons given above, and in accordance with the appended declaration, the claim is allowable since none of the citable prior art teaches this claimed feature. The appended declaration of Dr Itzhak Shalev an independent expert, is provided as evidence of the contention that Loopstra cannot be taken into account.

Fourth Argument

In addition to and irrespective of the above argument, applicant asserts that there is *nothing in the present problem* that ties the above six documents together. There is *no motivation to combine* the documents since they have nothing to do with the present problem. The *only possible search* that could ever have found these six *unrelated* documents is *a search based on the present claim.*

That is to say the mosaic of six documents can only be obtained by *ex post facto analysis* with *hindsight of the present invention.* Such hindsight analysis could *not objectively have been available* to the inventors.

That is to say one could *not* find these documents based on understanding the problem. One could *only mosaic* these *six* documents together based on *actual knowledge* of the *solution.*

Fifth Argument

Applicants argued *in the previous response* that the reference of Loopstra et al is taken from a field of endeavor, semiconductor lithography, which is *distant from* the field of the present application.

Applicants pointed out in the previous response, and the response before that, that the differences between the features of printing machines and the field of semiconductor lithography are such that a person ordinarily skilled in the art of textile printing *cannot be expected* to be versed in the technology of semiconductor lithography.

Applicants in the previous response *requested the Examiner to point out* the Rationale to combine Loopstra with the other references, according to the *current Examination Guidelines for Determining Obviousness* Under 35 U.S.C. 103 in View of the *Supreme Court Decision in KSR International Co. v. Teleflex Inc.*

In KSR, The US Supreme court stated "rigid preventative rules that deny recourse to *common sense* are neither necessary under nor consistent with, this court's case law". Common sense *dictates* that Loopstra would not be considered by the textile printer.

The Board of Appeal in Ex Parte Owlett Appeal 20070644 decided June 20, 2007, also ex parte Erkey Appeal 20071375 decided May 11, 2007, required a reason as

to *why* a particular combination suggested by the Examiner would be considered to be *conventional*. That is to say the skilled person must be able to find and consider the document without using inventive skill.

The Examiner, in support of his citation to Loopstra, stated, both in the previous advisory action and in the present response:

"Loopstra is from the same field of endeavor with that of Iwatsuki in terms of a conveyance mechanism for conveying a medium or substrate for the purpose of printing or processing"

Dr Itzhak Shalev, in the appended declaration, refers to the statement in the advisory action (the office action had not issued at the time but the Examiner's statements were identical) states in reply to this argument:

> "I cannot agree with the statement of the Examiner in the advisory action dated 13th January 2009 that
>
> "Loopstra is from the same field of endeavor with that of Iwatsuki in terms of a conveyance mechanism for conveying a medium or substrate for the purpose of printing or processing".
>
> "On the contrary, Iwatsuki, is a platen device for holding a workpiece in an ink-jet printer. Loopstra is for receiving dies in semiconductor lithography. The issues and problems that arise in semiconductor lithography are far removed from the issues and problems that arise in ink-jet printing. The scales involved in the two fields are far removed from each other, one works in the micron and nanometer scale and the other in the meter scale. The budgets and in the two fields are far removed from each other. The working environments in the two fields are far removed from each other. Furthermore, the training and study for each of the two fields are far removed from each other such that a researcher working in one field would not consider the other field in order to find solutions to problems."

Based on the above statement of Dr Shalev, the Examiner's motivation to include Loopstra as being in the same field of endeavor cannot be sustained. It is clear

that a same field of endeavor is not generated by being able to find a wording covering a generic category, but that it has to be seen as such by the person skilled in the field. As is clear from the above statement, Loopstra is not perceived by people working in the field to be of the same field of endeavor.

Sixth Argument

Even if Loopstra is included in the mosaic, the differences between the requirements of the semiconductor field, with requirements for microscopic precision, and the textile printing field where objects of garment size are considered, are such that no *relationship would be apparent to the skilled person* in any event.

Thus for example, in the field of Loopstra et al, while two object holders are mentioned, both the object holder and a printing device *must be static* during printing. The printing is typically performed by *a flash of light*. In the field of printing on textiles, the printing is performed by *moving the printing table* under the inkjet nozzles during the application of ink.

As a further example, in Loopstra, an equivalent of the array of inkjet nozzles is an imaging or projection system (focusing unit 5 and optical lens system 17 of Fig. 1 in Loopstra). Loopstra does not teach moving the imaging or projection system. If movement occurs, it occurs while stepping between exposures. In the present invention, there occur "back and forth movements" "during said applying". This is recited in the claims.

In summary, Loopstra belongs to a *technologically different field* which does *not* teach "applying ink", and does *not* teach "back and forth movements" "during said applying" and is carried out by *different* people who have studied *different* subjects and work for different organizations and different *kinds* of organizations.

Thus even though Loopstra teaches two object holders, the present *motivation* is to *overcome down time due to folding the textile onto the platen.* No such issue arises in Loopstra, who *in his clean room and with his semiconductor crystals,* does not have to deal with *folding.*

Hence the skilled person would never have considered Loopstra for *two independent* reasons, 1) because it is in a completely *different* field, 2) because it does

not teach a solution relevant to *down time while folding articles on a platen.* The appended declaration of Dr Itzhak Shalev is cited as evidence of both of these reasons.

Argument 7

None of the citations in the mosaic even hint at the existence of the *problem* of downtime due to the need to fold the fabric, never mind solve the problem as pointed out above. Therefore it is submitted that claim 13 is allowable over the artificial mosaic of six prior art documents for this reason as well.

Note this is not the same as argument 1. Argument 1 related to the documents all lacking the solution. Argument 8 relates to the documents all lacking any hint at the problem.

The expert, Dr Shalev states:

> "In any event, in neither Loopstra nor Iwatsuki does the issue arise of downtime due to the need to fold the textile onto the printing surface. Neither the workpiece of Iwatsuki nor the semiconductor die of Loopstra require folding, both simply being placed on the platen. Thus a person wishing to solve the problem of a human operator requiring to fold the textile would simply have no reason to suspect that either Loopstra in the semiconductor lithography field or Iwatsuki in the ink-jet field would teach a solution to his problem."

General

Claim 13 is thus believed to be allowable, *inter alia* for *any* one of the *seven* reasons given above, taken alone, and furthermore for each combination of these reasons and further for each of the reasons given in the response to the previous Office Action. These reasons are supported by the declaration of the independent expert in the field Dr Itzhak Shalev, which declaration constitutes evidence in US law.

Regarding claims 1 and 22.

Furthermore, claims 1, and 22, are also believed to be inventive over the cited references since their rejection *also* relies on Loopstra, which is not citable for the

reasons given above, and they also solve the problem of utilization of the printhead despite downtime due to folding of the fabrics, where neither the problem nor solution is taught or hinted at in any of the cited documents.

Independent claims 1, 13, and 22, are thus believed to be inventive over the cited references for this additional reason.

The dependent claims rejected in the above-mentioned rejections, claims 14-21, are deemed allowable by virtue of their parent claim 13.

The dependent claims are deemed allowable by virtue of their parent claim 1.

Summary

The claims are rejected over a mosaic of documents that do not relate to textile printing. The *only search* that could ever have combined these documents was one *based on knowledge of the claim*. Therefore the search represents *ex post facto analysis*.

Irrespective of the above, none of the documents teaches or hints either the problem of or any solution to *downtime of the print head while the textile is being folded on the platen*. Therefore even if the above combination had been made, it would *not* have been recognized as relevant by the skilled person.

While some of the citations do suggest improved throughput of *paper*, this does not solve the instant problem, because paper does not have to be *manually folded* onto the platen, a process which *cannot* be speeded up.

Irrespective of the above, the citation to Loopstra is from an *unrelated* field which the skilled person *in the field of textile printing* would *never* consult. The rule of common sense cited by the Supreme Court in KSR *does not allow* for Loopstra to be cited at all. The appended declaration of Dr Itzhak Shalev an independent expert, is provided as evidence of this contention.

The inability to cite Loopstra means that the second stage feature of the claims is *not found* in the prior art.

Irrespective of the above, the citation to Loopstra does *not* teach a solution to the issue of downtime of the printhead during folding of the textile, since the problem of folding of a textile does not arise in this document. The appended declaration of Dr Itzhak Shalev an independent expert, is provided as evidence of this contention.

Irrespective of the above, the motivations for combining the different documents require the skilled person to solve *five different problems simultaneously* including problems that are *mutually contradictory*. The skilled person would *never* be capable of making such a combination.

In this respect, and irrespective of the above, the Examiner's own reasoning regarding these different motivations is cited as *proof of inventive step*.

In view of the foregoing, it is respectfully submitted that the case for allowance is overwhelming. All the claims now pending in the application are allowable over the cited references. An early Notice of Allowance is therefore respectfully requested.

Respectfully submitted,

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Date: March 17, 2009

Enclosures:

- Declaration of Inventor Ofer Ben-Zur